

PROJECT DESCRIPTION

I. GENERAL:

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 108 AND MD 32 OFF RAMP IN HOWARD COUNTY. EXISTING SIGNAL HEADS SHALL BE REPLACED WITH LED SIGNAL HEADS. EXISTING PEDESTRIAN EQUIPMENT IS TO BE REPLACED WITH LED COUNTDOWN PEDESTRIAN SIGNALS AND APS PUSHBUTTONS. THE CROSSWALK CROSSING MD 108 AND ALL ASSOCIATED EQUIPMENT SHALL BE REMOVED. LOOP DETECTION SHALL BE REPLACED WITH VIDEO DETECTION. ADVANCE DETECTION FOR WESTBOUND MD 108 SHALL BE REPLACED WITH MICROLOOP PROBES. ADD ROUTE SHIELD ASSEMBLIES FOR MD 32 OFF RAMP.

MD 108 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

II. INTERSECTION OPERATION:

THE MD 108 APPROACHES SHALL OPERATE CONCURRENTLY WITH THE EASTBOUND MD 108 EXCLUSIVE/PERMISSIVE LEFT TURN PHASE. THE MD 32 WESTBOUND OFF RAMP SHALL OPERATE ALONE. THE PEDESTRIAN PHASE ACROSS BOTH RAMPS SHALL OPERATE ON RECALL.

PEDESTRIAN PHASE ACROSS MD 108 SHALL BE ELIMINATED. PEDESTRIAN PHASE TO CROSS MD 32 OFF RAMP SHALL OPERATE CONCURRENTLY WITH MD 108 MOVEMENTS.

III. CONTROLLER REQUIREMENTS:

THE EXISTING BASE MOUNTED CONTROLLER SHALL BE USED. SHA FORCES WILL INSTALL THE CENTRAL CONTROL UNIT AND THE VIDEO DETECTION INTERFACE.

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: 301-624-8140

MS. ANDREA ABEND
DISTRICT UTILITY ENGINEER
301-624-8115

MR. RAY JOHNSON
DISTRICT 7 MAINTENANCE
301-624-8105

THE CONTACT PERSONS FOR
OFFICE OF TRAFFIC AND SAFETY:

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATION SECTION
PHONE: 410-787-7652

MR. ROBERT SNYDER
ASST. CHIEF, TRAFFIC OPERATION DIVISION
410-787-7631

WIRING KEY

- a } 500' VIDEO DETECTION LEAD-IN CABLE
b }
c }
D } 5 CONDUCTOR ELECTRICAL CABLE
E } (NO. 14 AWG)
F }
G }
H } 2 CONDUCTOR ELECTRICAL CABLE
J } (NO. 14 AWG)
K }
L }
M } NO. 6 AWG STRANDED COPPER GROUND WIRE
+ } PROPOSED GROUND ROD
ES } EXISTING UNDERGROUND
ELECTRICAL SERVICE

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE STATE HIGHWAY ADMINISTRATION.

CATEGORY CODE NO.	QUANTITY	UNIT	DESCRIPTION
900000	1	EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
973023	39	SF	SHEET ALUMINUM SIGNS CONSISTING OF: 4 EA - R10-3(1) (9"x15") PEDESTAL POLE MOUNT 1 EA - ROUTE MARKER ASSEMBLY (30"x51") 1 EA - ROUTE MARKER ASSEMBLY (48"x75")

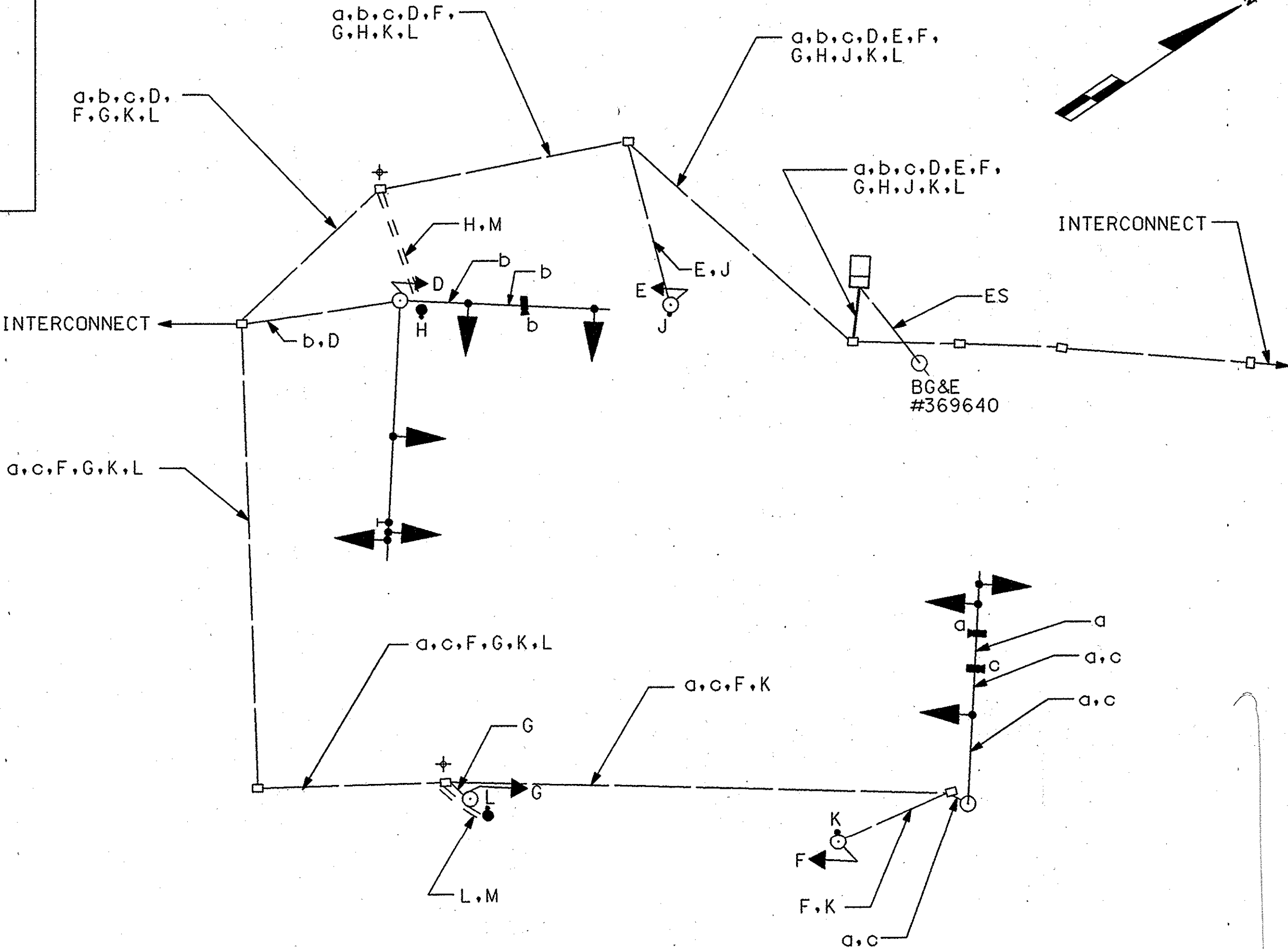
EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

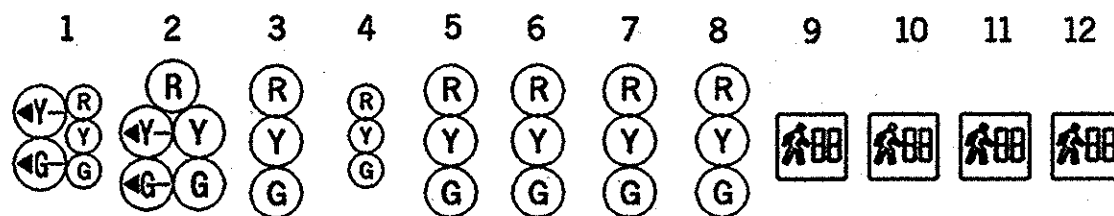
CATEGORY CODE NO.	QUANTITY	UNIT	DESCRIPTION
120500	1	LS	MAINTENANCE OF TRAFFIC
203030	1	CY	TEST PIT EXCAVATION
585620	205	LF	12" HEAT APPLIED WHITE PERM. PREFORMED THERM PAVEMENT MARKING
585624	60	LF	24" HEAT APPLIED WHITE PERM. PREFORMED THERM PAVEMENT MARKING
800000	1	EA	2-WIRE CENTRAL CONTROL UNIT
800000	4	EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON AND SIGN
800000	4	EA	16" LED COUNTDOWN PEDESTRIAN HEAD SECTION
800000	6	EA	8" LED SIGNAL HEAD SECTION
801004	4	CY	CONCRETE FOR SIGNAL FOUNDATION
801607	39	SF	INSTALL SHEET ALUMINUM SIGNS
802501	40	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805135	40	LF	3" SCHEDULE 80 PVC CONDUIT-TRENCHED
816001	3	EA	VIDEO DETECTION CAMERA
816010	3	EA	CONTROL CABLE, 500 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
818004	2	EA	10 FOOT BREAKAWAY PEDESTAL POLE
821003	2	EA	BREAKAWAY BASE SUPPORT SYSTEM FOR SIGNAL STRUCTURE
837001	2	EA	GROUND ROD - 3/4" DIAMETER X 10' LENGTH
860284	22	EA	12" LED SIGNAL HEAD SECTION
860292	2	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	1,010	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	1,075	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
873001	1	LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT (PER ASSIGNMENT)

WIRING DIAGRAM

NOTE: USE EXISTING SIGNAL WIRE TO CONNECT PROPOSED VEHICULAR LED SIGNAL HEADS.

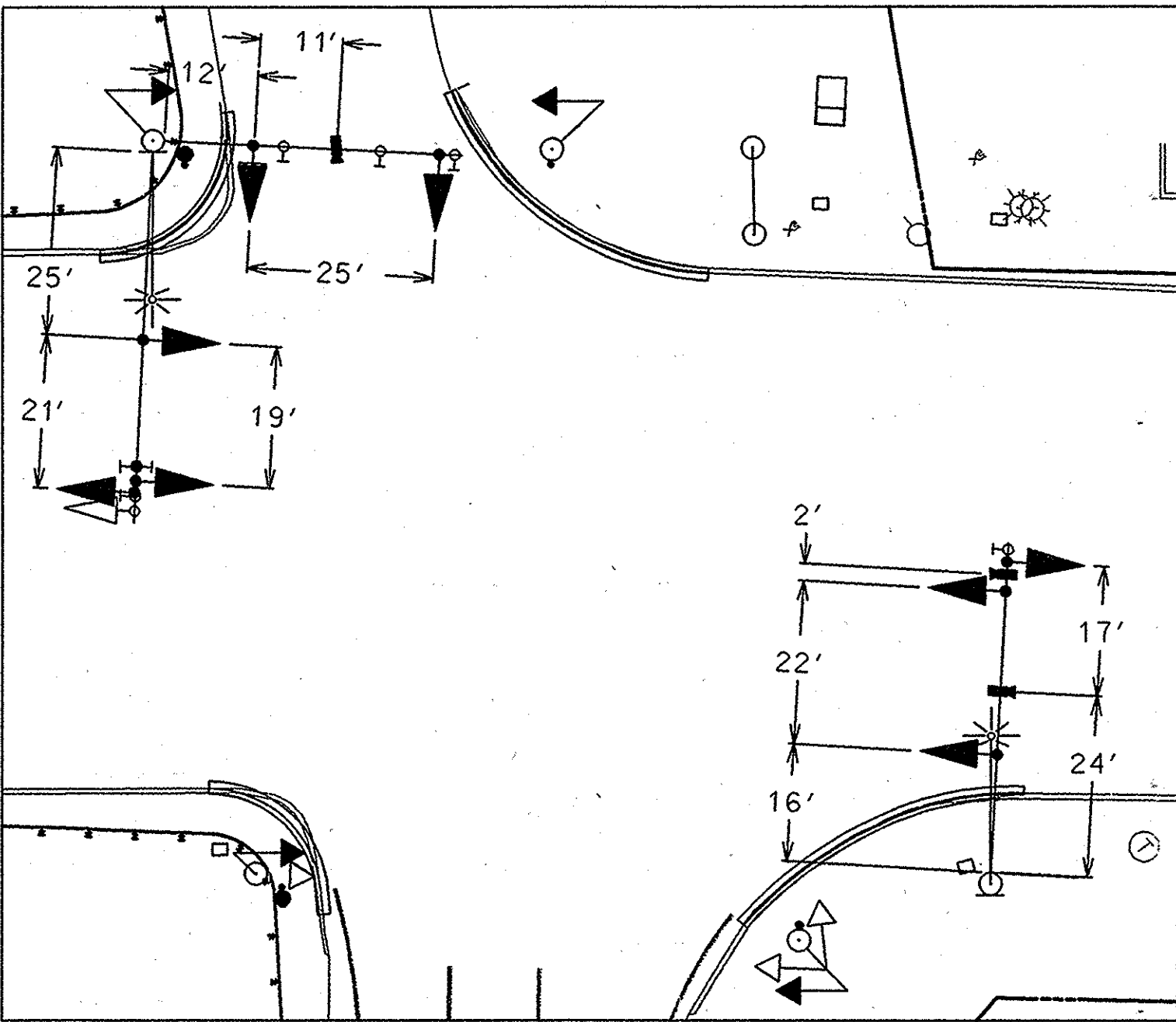


PHASE CHART



PHASE 1 AND 6	G	G	G	R	R	R	R	R	DW	DW	WK	WK	
1 AND 6 CHANGE	Y	Y	Y	G	R	R	R	R	DW	DW	WK	WK	
PHASE 2 AND 6	G	G	G	G	G	G	R	R	WK	WK	WK	WK	
PED CLEAR	G	G	G	G	G	G	R	R	FLDW	FLDW	FLDW	FLDW	
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW	
PHASE 4	R	R	R	R	R	R	G	G	DW	DW	DW	DW	
4 CHANGE	R	R	R	R	R	R	Y	Y	DW	DW	DW	DW	
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	DARK	DARK	DARK	DARK	

SIGNAL HEAD DIMENSION DIAGRAM



ADDENDUM No. 1

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
**MD 108 AND MD 32 W.B. OFF
RAMP /MD 32 N.B. ON RAMP**

GENERAL INFORMATION SHEET

SCALE 1" = 20' DATE 3/19/07 CONTRACT NO. H03585177

DESIGNED BY SJW COUNTY HOWARD
DRAWN BY SJW LOGMILE 13010803.78
CHECKED BY AJM T.I.M.S. NO. 1021
F.A.P. NO. TOD NO.

DRAWING NO. TS- 3317B-GI SHEET NO. 23 OF 27

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